REMARKS

Applicants have carefully considered the Office Action mailed on July 25, 2005. In the Office Action, claims 1-11 were rejected. Claims 1-11 are pending in the present patent application.

Rejections Under 35 U.S.C. § 102

The Examiner rejected claims 1-6 and 8-11 under 35 U.S.C. §102(b) as being anticipated by Fafet et al. (US Patent No. 5,931,152), hereinafter Fafet. A prima facie case of anticipation under 35 U.S.C. § 102 requires a showing that each limitation of a claim is found in a single reference, practice or device. Applicants respectfully traverse this rejection because Fafet does not teach or otherwise disclose each and every element of claims 1-6 and 8-11.

Fafet does not teach selection of a pattern of burner ports to restrict flame formation

Claims 1-6 and 8

Independent claim 1 recites a burner assembly that includes a burner grate comprising a plurality of humps integrally formed in a glass ceramic cooktop, and distributed around an opening in the cooktop. The burner assembly also includes a burner positioned in the opening, comprising a plurality of burner ports, ***a pattern of the burner ports selected to restrict flame formation*** in a region proximate the burner grate so that flames from the respective burner ports do not impinge upon the burner grate.

In contrast, Fafet discloses a glass-ceramic cooking plate for a gas cooking apparatus. The cooking plate includes at least one cooking site comprising a neck region defining an opening and a plurality of humps of the same height distributed around the opening. Further, Fafet discloses the humps being an integral part of the plate.

The Examiner considers that the humps in Fafet "are positioned a sufficient distance from the flame ports of the burner such that the flames from these ports will not impinge upon the burner grate". Applicants submit that nowhere in Fafet is the positioning of the humps with respect to the burner quantified or otherwise described. The Examiner is relying on Figs. 2 and 4 to make a subjective determination regarding the positioning of the humps, which Applicants submit is not capable of instant and unquestionable demonstration so as to avoid dispute (see MPEP § 2144.03 citing In re Ahlert, 424 F. 2d 1088, 1091, 165 USPQ 418, 420(CCPA 1970). Nevertheless, even if one were to assume *Arguendo* that Fafet's positioning of humps at a sufficient distance from the flame ports may be one way to mitigate flame impingement on the burner grate, Applicants are **not** attempting to claim positioning of humps. Rather, as recited in Applicant's claim 1, **flame formation is restricted** in a region proximate the burner grate through a **burner port pattern**. That is, flame formation is affected by the burner port pattern. However, in Fafet, there is not teaching of affecting or influencing flame formation.

As noted above, a burner port pattern is selected to restrict the flame formation in a region proximate the burner grate. For example, the spacing of the burner ports may be selected to avoid flame formation in a region proximate the burner grate. *See, e.g., paragraph [011] of the Detailed Description.*

The cited passage reads:

> As shown in FIG 1, the burner ports 12 corresponding to regions 24 above the burner 10 unobstructed by the burner grate 14 may be symmetrically spaced apart by flame-free portions 18. For example, each flame free portion 18 may have a width of W4, such as between 0.09 inches and 0.1 inches for a 12,000 BTU/Hour. However, in regions 16 above the burner 10 beneath a burner grate 14, a burner grate aligned flame-free portion 20, having a width W1, for example, different from W4, such as between 0.2 inches and 0.3 inches for a 12,000 BTU/Hour

> burner, may be used so that no flames 22 are provided beneath the burner grate 14. As would be understood by a skilled artisan, the values of W1 and W4 are a function of the burner diameter and rating of the burner and may also be selected according the location and size of the burner grate. Accordingly, flame formation in a region 16 above the burner 10 beneath a burner grate 14 may be avoided, while flames 22 may be provided in regions 24 not obstructed by the grate 14, advantageously resulting in reduced ARCO emissions compared to conventional burners.

Similarly, an orientation of the burner ports may be selected to deflect a flame from the port away from the burner grate. *See, e.g., paragraph [014] of the Detailed Description.*

The cited passage reads:

> In an aspect of the invention, a port 26 coinciding with the burner grate 14 may be oriented to deflect a flame 22 provided from the port 26 away from the burner grate 14. As shown in FIG. 3, in regions 16 above the burner 10 beneath a burner grate 14, the burner port 26 may be inclined with respect to a radial direction 40 so that an outlet 28 of the port 26 is positioned in a region 24 above the burner 12 unobstructed by the burner grate 14. As a result, a flame from the port 26 is directed away from the burner grate 14. For example, the port 26 may be inclined from an inlet 30 to the outlet 28 by an angle, θ, of about 15 degrees away from the radial direction 40. However, as would be understood by a skilled artisan, the angle of inclination selected will depend on the geometry of the burner and the relation of the location and size of the burner grate 14. In another aspect, a port 32 may be bifurcated at an outlet end

Clearly, Fafet as exemplified by this passage, does not teach or otherwise suggest selection of spacing or orientation of the burner ports to achieve flame restriction in the region proximate the burner grate. Therefore, Applicants submit that independent claim 1 is allowable and respectfully request the Examiner to reconsider rejection of the claim.

Claims 2-6 are further directed to restricting flame formation. For example, as emphasized in Applicant's claim 2 the burner port pattern is selected to *avoid* flame formation in the region proximate the burner grate. Furthermore, as recited in claim 3 the burner ports are aligned in the pattern so that no burner port is positioned proximate the

burner grate. Similarly, as recited in claim 4 the burner port positioned proximate the burner grate is configured to direct a flame away from the burner grate. Additionally, claims 5 and 6 recite burner port patterns including the burner grate being disposed at an angle with respect to a radial direction and a bifurcated burner grate to direct the flame away from the burner grate.

Absent any teaching regarding these recitations of claim 1, Fafet simply cannot support a *prima facie* case of anticipation. Therefore, Applicants submit that independent claim 1 is allowable and respectfully request the Examiner to reconsider rejection of the claim. Furthermore, the Examiner has not specifically addressed the rejection of claims 2-6 and 8 in the Office Action. Therefore, Applicants respectfully submit that the finality of the Office Action be removed and request the Examiner to address claims 2-6 and 8. As claims 2-6 and 8 depend from claim 1, Applicants submit that these claims are similarly allowable for at least the reasons set forth above with respect to claim 1.

Fafet does not teach the burner ports positioned to coincide with regions proximate the burner unobstructed by the burner grate

Claim 9

Independent claim 9 was similarly rejected as being anticipated by Fafet. It is Applicants position that claim 9 as originally filed is not anticipated by Fafet. Claim 9 recites a burner assembly that includes a burner grate comprising a plurality of humps, integrally formed in a glass ceramic cooktop, and distributed around an opening in the cooktop. The burner assembly also includes a burner positioned in the opening, comprising a plurality of burner ports positioned in the burner to coincide with regions proximate the burner unobstructed by the burner grate.

Applicants submit that at the very least Fafet does not teach or otherwise suggest a burner comprising burner ports that are positioned in the burner to coincide with regions proximate the burner unobstructed by the burner grate.

Accordingly, for at least the reasons set forth above, Applicants submit that Fafet does not anticipate claim 9. Therefore, Applicants submit that independent claim 9 is allowable and respectfully request the Examiner to reconsider rejection of the claim

Claim 10

Independent claim 10 was similarly rejected as being anticipated by Fafet. It is Applicants position that claim 10 as originally filed is not anticipated by Fafet. Claim 10 recites a burner assembly that includes a burner grate comprising a plurality of lumps, integrally formed in a glass ceramic cooktop, and distributed around an opening in the cooktop. The burner assembly also includes a burner positioned in the opening, comprising a plurality of flame-free portions between burner ports, at least some of the flame-free portions selected to coincide with the burner grate proximate the burner, thereby **avoiding interference between the burner grate and flames produced by the burner**.

As with claims 1 and 9, Applicants submit that at the very least Fafet does not teach or otherwise suggest a burner comprising flame-free portions that are selected to coincide with a burner grate to avoid interference between the burner grate and flames produced by the burner.

Accordingly, for at least the reasons set forth above, Applicants submit that Fafet does not anticipate claim 10. Therefore, Applicants submit that independent claim 10 is allowable and respectfully request the Examiner to reconsider rejection of the claim.

Claim 11

Independent claim 11 was similarly rejected as being anticipated by Fafet. It is Applicants position that claim 11 as originally filed is not anticipated by Fafet. Claim 11 recites a method of firing a burner comprising providing a burner assembly comprising a burner and a burner grate comprising a plurality of humps, integrally formed in a glass ceramic cooktop and distributed around an opening in the cooktop. The method also includes positioning the burner in the opening and configuring an array of burner ports in the burner to avoid flame formation in regions proximate the burner in correspondence with the humps so that flames from the burner do not impinge upon any burner grate therein.

As discussed above, Applicants submit that at the very least, Fafet does not teach or otherwise suggest configuring an array of burner ports such that the spacing or orientation of the burner ports is selected to avoid flame formation in a region proximate the burner grate so that flames from the burner do not impinge upon any burner grate therein.

Accordingly, for at least the reasons set forth above, Applicants submit that Fafet does not anticipate claim 11. Therefore, Applicants submit that independent claim 11 is allowable and respectfully request the Examiner to reconsider rejection of the claim.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claim 7 under 35 U.S.C. §103(a) as being unpatentable over Fafet in view of Pistein (U.S. Patent No. 4,518,346). Applicants submit that Pistein does not cure the deficiencies set forth above with respect to at least claim 1. Notably, that a pattern of the burner ports selected to restrict flame formation in a region proximate the burner grate so that flames from the respective burner ports do not impinge

upon the burner grate. As claim 7 depends from claim 1, Applicants submit that this claim is allowable for at least the reasons set forth above with respect to claim 1.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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